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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,226	01/17/2002	Patrice Hameau	T2146-907703	2631

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MILES & STOCKBRIDGE PC
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MCLEAN, VA 22102-3833

EXAMINER

PARTHASARATHY, PRAMILA

ART UNIT	PAPER NUMBER
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2136

DATE MAILED: 10/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/031,226	Applicant(s) HAMEAU ET AL.	
	Examiner Pramila Parthasarathy	Art Unit 2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.
2. Applicant's submission filed on September 05, 2006 has been entered and made of record.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Amended Claims 11 – 20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over amended claims 1 – 9 of copending Application No. 10/049,022. Although the conflicting claims are not identical, they are not patentably distinct from each other.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

10/031,226	10/049,022
Identifying a type of said typed data; storing the type of said typed data in a first series of given locations in a memory of said computer system; storing or updates said type information elements in a second series of given storage locations, in order to specify the type of these typed data	providing said sensitive data, which comprises a binary word with a length equal to a given number of bytes, dividing sensitive data into at least two parts in a given logical configuration, and storing said divided parts into respective ones of said at least two physically distinct storage devices, so as to require a reconstruction of said sensitive data in said embedded microchip system.

Response to Arguments

4. Applicant's arguments filed on 7/26, 2006 have been fully considered but they are not persuasive.

The amended title of the invention is not descriptive and does not clearly state Applicant's invention. Examiner suggests the same title as in previous action and as the Applicant agrees with the examiner's reasoning, Examiner further points to applicant's own arguments that the instant specification discloses "typed data stored in a first series of given locations in a memory of a computer system, particularly an embedded microchip system", wherein the instant claimed invention is for an embedded microchip system not a general computer system and Examiner again requests to change the title accordingly. The following title is again suggested: "Method for implementing and securing a typed data language in an embedded system".

With respect to claims 11 and 17, Applicant argues that Schwabe does not teach "during the execution of a sequence of instructions of predetermined types: storing or updating said type information elements in a second series of given storage locations, continuously verifying, prior to the execution of each of the predetermined instructions," and "the second series of given storage locations corresponding one-to-one with the first series of given storage locations". These arguments are not persuasive.

Schwabe teaches a method verifying the program prior to an installation of the program, along with the executable code that includes type specific instructions and

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data. Specifically, Schwabe teaches “during the execution of a sequence of instructions of predetermined types: storing or updating said type information elements in a second series of given storage locations, continuously verifying, prior to the execution of each of the predetermined instructions,” and “the second series of given storage locations corresponding one-to-one with the first series of given storage locations” (Column 15 line 39 – Column 16 line 65). Furthermore, Schwabe teaches verifying the optimized binary file (first series) that is compatible with the binary file that will be linked and executed with the context of the API definition files used during execution. Additionally, the applet (executable code) is verified using the applet binary file, the API definition file of any binary files containing items referenced by the applet binary file and the applet is stored in a secure state (second series) to protect against unauthorized modifications.

Therefore, the examiner respectfully asserts that the cited prior art does teach or suggest the amended subject matter broadly recited in the amended independent claims 11 and 17. The dependent claims 12 – 16 and 18 – 20 are rejected at least by virtue of their dependency on the independent claims and by other reason set forth in this office action. Accordingly, the rejection for the pending claims 11 – 20 is respectfully maintained.

Examiner suggests amending the claims with particular attention given to the instant specification paragraphs [0060] and [0088-95].

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 11 – 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Schwabe (U.S. Patent Number 6,651,186).

6. Regarding Claims 11 and 17, Schwabe teaches "identifying a type of said typed data; storing the type of said typed data in a first series of given locations in a memory of said computer system; wherein the interpreter further performs the following steps: additional data called type information elements, associated with each of said typed data and based on said identifier; storing or updates said type information elements in a second series of given storage locations in order to specify the type of these typed data, continuously verifying prior to the execution of each of the predetermined instructions, of the matching between a type indicated by these instructions and an expected type indicated by said type information elements stored in said second series of storage locations, so that said execution is authorized only when there is match between said types and wherein the second series of given storage locations corresponding one-to-one with the first series of given storage locations (Column 14 line 58 – Column 15 line 45 and Column 16 lines 28 – 65 and Column 19 line 18 – Column 20 line 45).

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7. Claim 12 is rejected applied as in rejecting Claim 11. Furthermore, Schwabe teaches wherein each of said type information elements comprises a string of bits stored in storage locations of said second series that correspond to one-to-one with storage locations in said first series in which said associated typed data are stored, and the configuration whereof represents one of said types of typed data (Column 14 line 58 – Column 15 line 45 and column 16 lines 8 – 65).

8. Claim 13 and 18 are rejected applied as in rejecting Claims 11 and 17. Furthermore, Schwabe teaches said instructions being those of an application written in a programming language of typed data and typed object, said typed data are constituted by typed objects; said interpreter incorporated in said computer system is a piece of software called virtual machine that manipulates said typed object; said storage locations in said memory of the computer system being organized into stacks comprising a variable number of levels depending on the instruction executed, each level constituting one of said storage locations, said typed objects are stored in at least a first elementary stack called a data area and a second elementary stack called a local variable area (Column 14 line 58 – Column 15 line 13 and Column 15 line 60 – Column 16 line 28),

and said type information elements are distributed into two additional elementary stacks that correspond one-to-one with said first and second elementary stacks, in order to specify the type of said associated objects stored in said data and local variable

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areas (Column 14 line 58 – Column 15 line 13 and Column 15 line 60 – Column 16 line 28).

9. Claim 14 is rejected applied as in rejecting Claim 11 . Furthermore, Schwabe teaches when there is no match, the execution of said instruction sequence is interrupted and replaced by the execution of instructions corresponding to pre-programmed security measures (Column 19 line 42 – Column 20 line 27).

10. Claim 20 is rejected applied as in rejecting Claim 17 . Furthermore, Schwabe teaches embedded system is a smart card (Column 6 lines 20 – 36 and Column 18 lines 15 – 43).

11. Claims 15 and 19 are rejected applied as in rejecting Claims 13 and 18 . Furthermore, Schwabe teaches type information elements stored in said second series or storage locations are associated with additional information elements that determine the size of said storage locations in said stacks storing said typed data (Column 17 lines 23 – 50).

12. Claim 16 is rejected applied as in rejecting Claim 13 . Furthermore, Schwabe teaches type information elements are associated with additional information elements called flags, in order to mark said objects that are associated with them and to indicate

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whether they should be saved in said stacks or can be erased (Column 17 lines 12 – 37 and Column 23 lines 9 – 61).

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the disclosing in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially disclosing all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pramila Parthasarathy whose telephone number is 571-272-3866. The examiner can normally be reached on 8:00a.m. To 5:00p.m.. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami can be reached on 571-232-4195. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR only. For more information about the PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pramila Parthasarathy

October 09, 2006.

NASSER MOAZZAMI
SUPERVISORY PATENT EXAMINER
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10/11/06